California Regional Water Quality Control Board
Santa Ana Region

April 19, 2001

ITEM: 19

SUBJECT: Administrative Civil Liability Complaint No. 01-48, Ben Goedhart, dba Vermeer & Goedhart Dairy #1

SUMMARY

Ben Goedhart, dba Ed Vermeer & Goedhart Dairy #1, is alleged to have violated California Water Code (CWC) Section 13385(a)(2) by failing to comply with Discharge Specification A.3 of the General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) within the Santa Ana Region, NPDES No. CAG018001 (Order No. 99-11). On March 23, 2001, the Executive Officer issued Administrative Civil Liability Complaint (ACLC) No. 01-48 to Ben Goedhart. The maximum amount of liability that the Board could assess administratively under Section 13385(c) for the discharges that were observed is $20,000, plus $10 per gallon for each gallon in excess of 1,000 gallons that were discharged. The assessment proposed in ACLC No. 01-48 is $20,000. The matter before the Board is whether to affirm, reject, or modify this assessment.

BACKGROUND

The Board began issuing individual waste discharge requirements to all dairy facilities in the Region in 1972. In 1994, the Board adopted a general NPDES permit for concentrated animal feeding operations (Order No. 94-7). Order No. 94-7 was adopted to streamline the permitting process for dairies, and to incorporate recent federal and state storm water regulations. Order No. 94-7 expired on March 1, 1999. Therefore, on August 20, 1999, the Board adopted General Waste Discharge Requirements for Concentrated Animal Feeding Operations (Dairies and Related Facilities) within the Santa Ana Region, NPDES No. CAG018001 (Order No. 99-11). Dairies previously enrolled under Order No. 94-7 were automatically enrolled in Order No. 99-11. Currently, there are approximately 300 dairy and related facilities in the Santa Ana Region.

Dairies generate both solid and liquid wastes. Manure is deposited in the corrals, where it accounts for about 90% of the manure generated by a dairy operation. The corrals are generally cleaned twice each year in order to maintain a healthy environment for the animals. All manure generated at dairies is removed and taken to composting operations or applied to the ground for agricultural use as a fertilizer, both within, and outside, the Region.

Liquid wastes consist of wash water that is generated at the milk barn and storm water runoff from manured areas. Milking cows are washed before being milked, two or three times a day. Although the amount of wash water that is generated varies from dairy to dairy, a minimum of 50 gallons of water per day is usually generated for each milking cow. For example, a typical dairy of 800 milking cows will usually generate at least 40,000 gallons of wash water per day. Because a milking cow will spend approximately 10% of its day in the milk barn, the wash water will contain approximately 10% of the manure produced by a milking cow. Storm water runoff from manured areas includes

runoff from corrals, stockpile areas, and disposal fields. Order No. 99-11 requires that all storm water runoff from manured areas be contained on property owned or controlled by the dairy. Storm water runoff from manured areas and dairy wash water is discharged to ponds or applied to fields for disposal by evaporation and percolation.

Unfortunately, due in some part to the relatively smaller land area of many dairies and the high concentration of dairies and dairy animals in the Chino Basin, discharges of wastewater from dairies during periods of rainfall occasionally occur. Sometimes, these discharges occur as a result of circumstances beyond the control of the dairy operator. Most discharges occur from containment structures as a result of burrowing animals (rodent holes). The rodent holes are usually not apparent until the facility's containment structures begin storing increasing amounts of wastewater during winter rains. Some dairies are also affected by the lack of flood control infrastructure in the Chino dairy area. Storm water from streets and drainage ditches can enter some facilities, resulting in flooding of wastewater ponds and disposal fields. Much of this storm water originates from developed areas to the north, and cannot be diverted by the dairies. The flooding that occurs sometimes creates a "domino effect" as dikes are broken or overtopped and dairies discharge onto adjacent, down gradient dairies, and overwhelm their neighbor's containment capacity, causing additional discharges. Dairies are not permitted to discharge wastewater to waters of the United States, except under certain conditions when a 25-year, 24-hour storm occurs. However, Board staff takes certain circumstances into consideration, such as those noted above, before recommending enforcement actions for dairy wastewater discharges that do occur. Enforcement actions are generally recommended when discharges occur due to negligence, failure to implement reasonable actions to prevent the discharges, or as a result of deliberate actions.

FINDINGS

Ben Goedhart has been operating a dairy at 6851 Archibald Avenue since 1984. In June of 1985, Mr. Goedhart submitted a Report of Waste Discharge and was subsequently issued waste discharge requirements (Order No. 85-134) on September 13, 1985. On September 9, 1999, Ben Goedhart was issued a letter authorizing him to discharge in accordance with the terms and conditions of Order No. 99-11.

On February 13, 2001, Board staff observed three separate discharges of manured runoff from the southern boundary of the dairy. One discharge, at an estimated flow rate of 5 gallons per minute (gpm), consisted of corral runoff flowing into the intersection of Archibald Avenue and Schleisman Road through a breach in a low berm along the southeast corner of the facility. The discharged runoff commingled with storm water runoff flowing south on Archibald Avenue. A second discharge location was observed approximately 50 feet west of the first discharge, on the east side of an entrance to a feed alley. Board staff observed that runoff from the feed alley and the easterly corral had accumulated behind a loosely placed dirt dike along the fence line adjacent to Schleisman Road. The pooled runoff had eroded a portion of the dike and was overflowing at an estimated rate of 40 gpm. The discharge flowed onto Schleisman Road and then east on Schleisman to Archibald Avenue. A third discharge was occurring from a feed alley at the southwest corner of the facility, adjacent to Schleisman Road. The discharge originated from a pool of corral runoff at the southern section of a corral on the east side of the feed alley. The pooled runoff appeared to be the result of the placement of a manure berm that separated the corral from a containment pond to the south. The manured runoff was being discharged from the corral, then proceeded south along the feed alley, and then flowed onto Schleisman Road at an estimated flow

rate of 15 gpm. The runoff then proceeded east on Schleisman to Archibald Avenue. Runoff that reaches Archibald Avenue flows south along the west side of Archibald Avenue and then to the Santa Ana River, a water of the United States.

Board staff met with Mr. Goedhart regarding the discharges. Mr. Goedhart placed a loose load of dirt to stop flow at the second discharge location. He agreed to do the same at the first discharge location. At the third discharge location, Board staff recommended that Mr. Goedhart cut the manure berm to allow the runoff to flow into the containment pond. Board staff returned that afternoon and found that all of the discharges had ceased.

Two weeks later, on February 27, 2001, Board staff observed a discharge of manured corral runoff near the same area as the second discharge location observed on February 13, 2001. The discharge was flowing at a rate of approximately 250 gpm onto Schleisman Road. The discharge flowed east on Schleisman Road to Archibald Avenue. Board staff observed a front-end loader working in the commodity storage area within sight of the discharge, but did not observe any effort being made to stop the discharge.

Based upon precipitation data from several recording stations in the Chino area, it appears that at no time did the Chino area receive sufficient rainfall to match or exceed a 25-year, 24-hour storm event (about 4.5 inches). Rainfall in February 2001 occurred in three storms that each lasted from 3 to 6 days. The storm that occurred during the four-day period from February 10 to February 14 resulted in about 4.1 inches of rain, with the highest average 24-hour rainfall of about 2.4 inches occurring on February 12. About 1.0 inch of rain occurred on February 13. A much smaller storm lasting from February 18 to February 20 delivered about 0.4 inches. The third storm event from February 23 to February 28 delivered about 2.7 inches of rain over the 5 days, with the highest average 24-hour rainfall being 0.9 inches.

Prior to February 12, the Chino area had received about 5.8 inches of rain for the season, almost all of which occurred during the month of January. The storm that began on February 10 was preceded by approximately 2 weeks of dry weather, and prior to January, there had been no appreciable rain since October.

DISCUSSION

CWC Section 13385(e) specifies factors that the Board shall consider in establishing the amount of civil liability. These factors are discussed below:

1. Nature, Circumstances, Extent and Gravity of the Violation

The discharges noted above were in violation of Discharge Specification A.3 of Order No. 99-11. Discharge Specification A.3 states “The discharge to any surface water bodies, or tributary thereof, is prohibited unless a chronic or catastrophic rainfall causes overflow from a storage facility designed, constructed, maintained and operated to contain all process generated wastewater plus the runoff from a 24-hour, 25-year storm.” CWC Section 13385(c) provides that the Board may impose administrative civil liability for violation of waste discharge requirements in an amount that shall not exceed ten thousand dollars ($10,000) for each day in which the violation occurs, plus $10 per gallon for each gallon in excess of 1,000 gallons that were discharged. Therefore, the maximum amount of liability, which the Board could assess administratively under CWC Section 13385 (c) for the discharges observed on February 13 and 27, 2001, is $20,000,

plus $600 per minute (60 gpm x $10 per gallon) for the duration of the discharge on February 13, and $2500 per minute ($250 x $10 per gallon) for the duration of the discharge on February 27. The total duration of the discharge is unknown.

The combined flow rate of the discharges that occurred on February 13, when observed by Board staff, was about 60 gallons per minute (gpm). The flow rate that was observed on February 27 was about 250 gpm. Therefore, although it is not known how long the discharges occurred, the volume of the discharge was probably significant. The discharge was tributary to Reach 3 of the Santa Ana River. The beneficial uses of Reach 3 of the Santa Ana River include, in part, water contact recreation, non-contact water recreation, groundwater recharge and warm freshwater habitat. Municipal wastewater that is discharged to Reach 3 of the Santa Ana River requires a high level of treatment to render the wastewater essentially free of organic matter and pathogens. Storm water runoff from corrals contains pollutants, including, in part, pathogens, nutrients (nitrogen and phosphorus), chemical oxygen demand, high turbidity, ammonia, and dissolved solids (salts). The pollutants in dairy wastewater can significantly impact the beneficial uses of the Santa Ana River and groundwater in Orange County.

The discharges that were observed on February 13 and 27, 2001 were a result of inadequate containment structures. Constructing and maintaining adequate storm and wastewater containment facilities could have prevented the discharges.

2. Ability to Pay the Proposed Assessment

Regional Board staff has no information to indicate that Ben Goedhart would be unable to pay the proposed assessment.

3. Any Prior History of Violations

Ben Goedhart has had a history of discharge violations at this facility. On February 7, 1994, Board staff observed a discharge of corral runoff onto Schleisman Road near the corner of Schleisman and Archibald Avenues. Board staff discussed the discharge with the facility foreman who indicated that he would raise the dike and construct a diversion ditch to direct runoff to a disposal pond. This discharge occurred in the same general area as the second discharge that was observed on February 13, 2001.

On February 19 and March 18, 1998, Board staff observed discharges of wastewater from a containment pond along Schleisman Road. Board staff discussed the violation with Ben Goedhart and a follow-up letter was sent on July 27, 1998. In that letter, it was noted that “On many other occasions during this winter and early spring [1998], Board staff has noted manured water being discharged to Schleisman Road from your southwest pond.”

On March 8, 2000, Regional Board staff observed multiple discharges of corral runoff from a low, uneven dike onto Archibald Avenue. A Notice to Comply was issued to Ben Goedhart. During follow-up inspections on March 20 and 30, 2000, there was no evidence that measures had been completed to correct the situation. Subsequently, on April 19, 2000, Board staff sent a letter requesting corrective action, but it was returned as undeliverable.

On May 23, 2000, Board staff observed a discharge of wastewater through a dike onto Schleisman Road, near the corner of Schleisman and Archibald Avenues. Board staff discussed the discharge with Ben Goedhart that day and, subsequently, the dike was

raised using loose dirt. This discharge occurred in the same general area as the discharges that were observed on February 7, 1994 and February 13, 2001.

4. Degree of Culpability

Ben Goedhart is entirely culpable for the discharges observed on February 13 and 27, 2001. Board staff found no evidence that run-on from an offsite source was a factor in these discharges. The north side of the dairy is protected from storm water originating off-site by a dike with a minimum height of 2 feet. On the north and west perimeter of the facility, a drainage swale exists that diverts storm water away from the facility's corrals. The eastern side of the facility, on Archibald Avenue, is raised above the level of the roadway, thus eliminating influence from drainage from Archibald Avenue.

5. Economic Benefit or Savings, if any, Resulting from the Violation

Proper containment could have been achieved through the construction of engineered dikes, the placement of a pump, the construction of a pond, a diversion ditch or other means to prevent the discharges observed near the corner of Archibald and Schleisman. CWC Section 13385(e) states "At a minimum, liability shall be assessed at a level that recovers the economic benefits, if any, derived from the acts that constitute the violation." The proposed administrative civil liability is likely at a level that recovers the economic benefits that were derived by failing to take appropriate actions to prevent the discharges.

Based on consideration of the above factors, ACLC No. 01-48 proposed that administrative civil liability be imposed by the Board in the amount of $20,000.

RECOMMENDATION

Regional Board staff recommends that the Board affirm the assessment proposed in ACLC No. 01-48. Further, staff recommends that the Board direct the Executive Officer to take appropriate steps to collect the assessment in the event that Ben Goedhart fails to pay the assessment in a timely manner.